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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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MATTHEW B. SQUIRE

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EXAMINER

MIRZA, ADNAN M

ART UNIT	PAPER NUMBER
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2445

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02/17/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/407,915	SQUIRE ET AL.	
	Examiner	Art Unit	
	ADNAN M. MIRZA	2445	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12/04/2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-70 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-70 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12/04/2008</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 1 rejected under 35 U.S.C. 103(a) as being unpatentable over Gai et al (U.S. 6,697,360) and further in view of O'Toole et al (U.S. 6,345,294).

As per claim 1, Gai discloses a method of configuring a first network device for connection to a communications network subnet having a second network device, the method comprising: determining, with a configuration determination module of the first network device (col. 5, lines 35-48), configuring the first network device, with an auto configuration module of the first network device. (col. 14, lines 40-54).

However Gai failed to disclose configuration attributes for operably connecting the first network device to the subnet based on configuration information for the subnet detected by the first network device, accordingly to the configuration attributes so that the first network device is operably connected to the subnet.

In the same field of endeavor O'Toole disclosed, "The SODA appliance runs a boot algorithm to configure itself. The goal of the boot algorithm to configure itself. The goal of the boot algorithm is to learn enough about the IP environment in which the appliance is installed to obtain a connection with an appliance registry 28 in order to download additional configuration information. Ideally, the appliance can begin operation without requiring any local user intervention, but if a local administrator must assign some network parameters, it will be most convenient to use nothing more than a web browser and a form page (col. 6, lines 39-48)".

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have incorporated the SODA appliance runs a boot algorithm to configure itself. The goal of the boot algorithm to configure itself. The goal of the boot algorithm is to learn enough about the IP environment in which the appliance is installed to obtain a connection with an appliance registry 28 in order to download additional configuration information. Ideally, the appliance can begin operation without requiring any local user intervention, but if a local administrator must assign some network parameters, it will be most convenient to use nothing more than a web browser and a form page as taught by O'Toole in the method and system of Gai to increase the efficiency of the network by reducing the downtime in the network.

3. Claims 1-6, 15-20, 30-34, 43-48, 57-62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gai et al (U.S. 6,697,360) and further in view of O'Toole et al (U.S. 6,345,294).

As per claim1, Gai disclosed a method of configuring a first network device for connection to a communications network subnet having a second network device, the method comprising: determining, with a configuration determination module of the first network device (col. 5, lines 35-48), configuring the first network device, with an auto configuration module of the first network device, accordingly to the configuration attributes so that the first network device is operably connected to the subnet (Col. 14, lines 47-51).

Gai did not explicitly disclose configuration attributes for operably connecting the first network device to the subnet based on configuration information for the subnet detected by the first network device

However, O'Toole disclosed," the SODA appliance runs a boot algorithm to configure itself. The goal of the boot algorithm to configure itself. The goal of the boot algorithm is to learn enough about the IP environment in which the appliance is installed to obtain a connection with an appliance registry 28 in order to download additional configuration information. Ideally, the appliance can begin operation without requiring any local user intervention, but if a local administrator must assign some network parameters, it will be most convenient to use nothing more than a web browser and a form page (col. 6, lines 39-48)".

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have incorporated the SODA appliance runs a boot algorithm to configure itself. The

goal of the boot algorithm to configure itself. The goal of the boot algorithm is to learn enough about the IP environment in which the appliance is installed to obtain a connection with an appliance registry 28 in order to download additional configuration information. Ideally, the appliance can begin operation without requiring any local user intervention, but if a local administrator must assign some network parameters, it will be most convenient to use nothing more than a web browser and a form page as taught by O'Toole in the method and system of Gai to increase the efficiency of the network by reducing the downtime in the network.

4. As per claim 29 Gai-O'Toole disclosed a computer network having at least one sub network, the at least one sub network having a plurality of data routers that communicate data packets over the network, the sub network including at least one auto configuring data router, the at least one auto configuring data router comprising: a configuration determination module that determines configuration attributes for operably connecting the auto configuring data router to the subnet based on configuration information for the subnet detected by the auto configuring data router (O'Toole, col. 7, lines 40-60); auto configuration module that configures the auto configure data router according to the configuration attributes so that the auto configuring data router is operably connected to the subnet (Gai, col. 15, lines 18-31).

5. Regarding claims 2, 16, 30, 44, 58, Gai-O'Toole taught configuring the first network device automatically by the auto configure module (Gai, col. 14, lines 47-51).

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6. Regarding Claims 3, 17, 31, 45, 59, Gai-O'Toole taught configuring the first network device as a guided process in which the auto configuration module interacts with user and presents to the user suggested configuration choices based on the configuration attributes (Gai, col. 15, lines 18-31).

7. Regarding claims 4, 18, 32, 46, 60, Gai-O'Toole taught accompanying configuration choices by an explanation to the user as to why the configuration choices have been suggested (O'Toole, col. 6, lines 39-53).

8. Regarding claims 5, 19, 33, 47, 61, Gai-O'Toole taught configuration attributes comprise an Internet Protocol (IP) subnet mask determined based upon the configuration information unique to the subnet and derived from passively listening to router control traffic detected by the first network device at interfaces between the first network device and the subnet (Gai, col. 5, lines 35-48).

9. Regarding claims 6, 20, 34, 48, 62, Gai-O'Toole taught configuration attributes comprise at least one of Dynamic Host Configuration Protocol (DHCP) forwarding data and DHCP server address (Gai, col. 5, lines 35-48).

10. Claims 7-14, 21-29, 35-42, 49-56, 63-70 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gai et al (U.S. 6,697,360) and further in view of O'Toole et al (U.S. 6,345,294), and further in view of Ekstrom et al. (U.S. 5, 968, 126).

Regarding claims 7, 21, 35, 49, 63, Gai-O'Toole - Ekstrom taught configuration attributes comprises virtual local area network (VLAN) information including tag identifications, types, protocols, addresses, and port-to-VLAN mappings (col. 3, lines 53-57).

Gai and O'Toole failed to disclose the VLAN information as configuration attributes.

It would have been obvious to one having ordinary skill in the art at the time of the invention was made incorporated the VLAN information as configuration attributes as taught by Ekstrom in the methodology of Gai and O'Toole to increase the efficiency of the networking method by making it more diversified.

11. Regarding claims 8, 22, 36, 50, 64 Gai-O'Toole - Ekstrom taught configuration attributes comprise at least one of the Spanning Tree Group information, Simple Network Management Protocol (SNMP) server addresses (Ekstrom, col. 4, lines 12-21). OSPF, RIP and VRRP are well know routing protocols in routing configuration of a router and according to Network working group RFCs Open Shortest Path First (OSPF) timer information (RFC 1583), Routing Information Protocol (RIP) broadcast timer information (RFC 2453), and Virtual Router Redundancy Protocol (VRRP) information (RFC 2338) are very well explained.

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12. Regarding claims 9, 23, 37, 51, 65, Gai-O'Toole - Ekstrom taught wherein the step of determining configuration attributes further comprises communicating with a network centralized configuration server (O'Toole, col. 6, lines 39-48).

13. Regarding claims 10, 24, 38, 52, 66, Gai-O'Toole - Ekstrom taught configuring network centralized server using Simple Network Management Protocol (SNMP) to communicate (Ekstrom, col. 8, lines 52-63).

14. Regarding claims 11, 53, 67, Gai-O'Toole - Ekstrom taught wherein the step of communicating with a network centralized configuration server comprises: sending to the centralized configuration server a message containing addresses of network neighbours on the subnet (Ekstrom, col. 3, lines 19-27); searching in a configuration database of the centralized configuration server for configuration attributes relevant to the first network device (Ekstrom, col. 5, lines 23-36); and forwarding the configuration attributes from the configuration database to the first network device (Ekstrom, col. 12, lines 55-67).

15. Regarding claims 12, 26, 40, 54, 68, Gai-O'Toole - Ekstrom taught wherein the step of determining configuration attributes further comprises communicating with the second network device (O'Toole, col. 6, lines 54-65).

16. Regarding claims 13, 27, 29, 41, 55, 69, it is well known in the art of networking according to networking group RFCs that wherein the step of communicating with the second

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network device using a protocol based on Internet Control Message Protocol (ICMP) (RFC 1885) or User Datagram Protocol (UDP) (RFC 1240). In the field of networking ICMP and UDP are very common networking protocols and very well explain according to Networking group RFCs.

17. Regarding claims 14, 28, 42, 56, 70, Gai-O'Toole - Ekstrom taught wherein the step of determining configuration attributes comprises analyzing routing protocol control packets be detected by first Network device (O'Toole, Col. 8, lines 18-34).

18. Regarding claims 25, 39, Gai-O'Toole - Ekstrom taught configuration determination module receives relevant configuration attributes from the centralized configuration server (Ekstrom, col. 12, lines 55-67).

Response to Arguments

Applicant's arguments with respect to claims 1-70 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

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19. Any inquiry concerning this communication or earlier communication from the examiner should be directed to Adnan Mirza whose telephone number is (571)-272-3885.

20. The examiner can normally be reached on Monday to Friday during normal business hours. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Cardone can be reached on (571)-272-3933. The fax for this group is (703)-746-7239. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

21. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at (866)-217-9197 (toll-free).

/Adnan M Mirza/
Examiner, Art Unit 2445
/Larry D Donaghue/
Primary Examiner, Art Unit 2454